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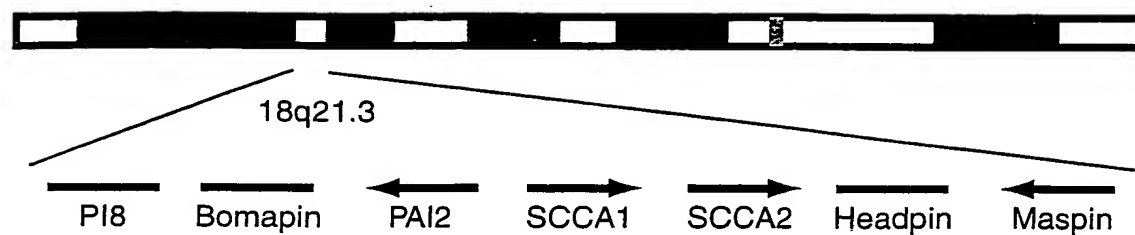
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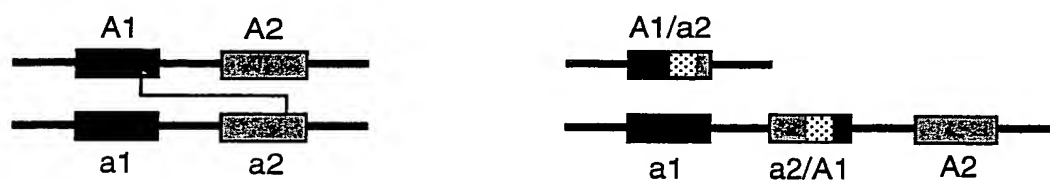
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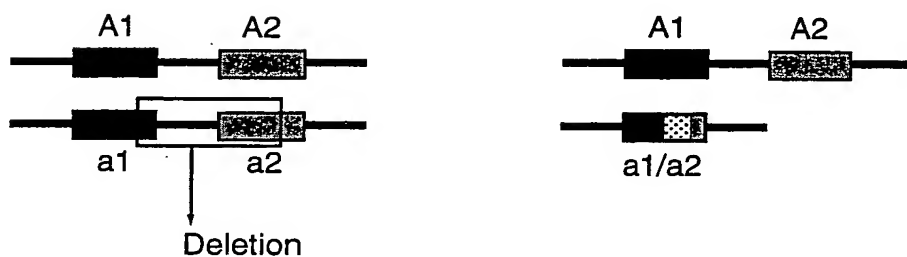


FIG. 1



2/10

SCCA1 I1-ATGAATTCAC TCAGTGAAGC CAACACCAAG TTCATGTTTCG ACCTGTTCCA ACAGTTCAGA  
SCCA2 I1-ATGAATTCAC TCAGTGAAGC CAACACCAAG TTCATGTTTCG ATCTGTTCCA ACAGTTCAGA

AAATCAAAAG AGAACAACAT CTTCTATTCC CCTATCAGCA TCACATCAGC ATTAGGGATG  
AAATCAAAAG AGAACAACAT CTTCTATTCC CCTATCAGCA TCACATCAGC ATTAGGGATG

GTCCTCTTAG GAGCCAAAGA CAACACTGCA CAACAGATTA AGAAG-I2-GTTCT TCACTTTGAT  
GTCCTCTTAG GAGCCAAAGA CAACACTGCA CAACAATTA GCAAG-I2-GTTCT TCACTTTGAT

CAAGTCACAG AGAACACCAC AGGAAAAGCT GCAACATATC AT-I3-GTTGATAG GTCAGGAAAT  
CAAGTCACAG AGAACACCAC AGAAAAAGCT GCAACATATC AT-I3-GTTGATAG GTCAGGAAAT

GTTTCATCACC AGTTTCAAAA GCTTCTGACT GAATTCAACA AATCCACTGA TGCATATGAG  
GTTTCATCACC AGTTTCAAAA GCTTCTGACT GAATTCAACA AATCCACTGA TGCATATGAG

CTGAAGATCG CCAACAAGCT CTTCCGAGAA AAAACGTATC TATTTTTTACA G-I4-GAATATTTA  
CTGAAGATCG CCAACAAGCT CTTCCGAGAA AAGACGTATC AATTTTTTACA G-I4-GAATATTTA

GATGCCATCA AGAAATTTTA CCAGACCAGT GTGGAATCTG TTGATTTTGC AAATGCTCCA  
GATGCCATCA AGAAATTTTA CCAGACCAGT GTGGAATCTA CTGATTTTGC AAATGCTCCA

GAAGAAAGTC GAAAGAAGAT TAACTCCTGG GTGGAAAGTC AAACGAATG-I5-AAAAAATTAA  
GAAGAAAGTC GAAAGAAGAT TAACTCCTGG GTGGAAAGTC AAACGAATG-I5-AAAAAATTAA

AACCTAATTC CTGAAGGTAA TATTGGCAGC AATACACAT TGGTCTTGT GAACGCAATC  
AACCTATTTT CTGATGGGAC TATTGGCAAT GATACGACAC TGGTCTTGT GAACGCAATC

TATTTCAAAG GGCAGTGGGA GAAAGAAATTT AATAAAGAAG ATACTAAAGA GGAAAAATTT  
TATTTCAAAG GGCAGTGGGA GAATAAATTT AAAAAGAAA AACTAAAGA GGAAAAATTT

TGGCCAAACA AG-I6-AATACATA CAAGTCCATA CAGATGATGA GGCAATACAC ATCTTTTTCAT  
TGGCCAAACA AG-I6-AATACATA CAAATCTGTA CAGATGATGA GGCAATACAA TTCTTTTAAAT

TTTGCCTCGC TGGAGGATGT ACAGGCCAAG GTCCTGGAAA TACCATACAA AGGCAAAGAT  
TTTGCCTTGC TGGAGGATGT ACAGGCCAAG GTCCTGGAAA TACCATACAA AGGCAAAGAT

CTAAGCATGA TTGTGTGCT GCGCAATGAA ATCGATGGTC TCAGAGAAG-I7-CTTGAAGAGAAA  
CTAAGCATGA TTGTGTGCT GCGCAATGAA ATCGATGGTC TGAGAGAAG-I7-CTTGAAGAGAAA

CTCACTGCTG AGAAATTGAT GGAATGGACA AGTTTGCAGA ATATGAGAGA GACACGTGTC  
CTCACTGCTG AGAAATTGAT GGAATGGACA AGTTTGCAGA ATATGAGAGA GACATGTGTC

GATTTACACT TACCTCGGTT CAAAGTGGAA GAGAGCTATG ACCTCAAGGA CACGTTGAGA  
GATTTACACT TACCTCGGTT CAAAATGGAA GAGAGCTATG ACCTCAAGGA CACGTTGAGA

ACCATGGGAA TGGTGGATAT CTTCAATGGG GATGCAGACC TCTCAGGCAT GACCGGGAGC  
ACCATGGGAA TGGTGAATAT CTTCAATGGG GATGCAGACC TCTCAGGCAT GACCTGGAGC

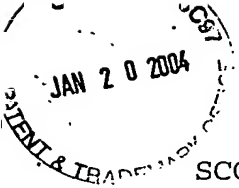
CGCGGTCTCG TGCTATCTGG AGTCCTACAC AAGGCCTTTG TGGAGGTAC AGAGGAGGGA  
CACGGTCTCT CAGTATCTAA AGTCCTACAC AAGGCCTTTG TGGAGGTAC TGAGGAGGGA

GAGAAGCTG CAGCTGCCAC CGCTGTAGTA GGATTCGGAT CATCACCTAC TTCAACTAAT  
GTGGAAGCTG CAGCTGCCAC CGCTGTAGTA GTAGTCGAAT TATCATCTCC TTCAACTAAT

GAAGAGTTCC ATTGTAATCA CCCTTTCTTA TTCTTCATAA GGCAAAATAA GACCAACAGC  
GAAGAGTTCT GTTGTAAATCA CCCTTTCTTA TTCTTCATAA GGCAAAATAA GACCAACAGC

ATCCTCTTCT ATGGCAGATT CTCATCCCCG TAG  
ATCCTCTTCT ATGGCAGATT CTCATCCCCA TAG

FIG. 2



3/10

SCCA1 MNSLSEANTK FMFDLFQQFR KSKENNIFYS PISITSALGM VLLGAKDNTA  
SCCA2 MNSLSEANTK FMFDLFQQFR KSKENNIFYS PISITSALGM VLLGAKDNTA

QQIKKVLHFD QVTENTTGKA ATYHVDRSGN VHHQFQKLLT EFNKSTDAYE  
QQISKVLHFD QVTENTTEKA ATYHVDRSGN VHHQFQKLLT EFNKSTDAYE

LKIANKLFGE KTYLFLQEYL DAIKKFYQTS VESVDFANAP EESRKKINSW  
LKIANKLFGE KTYQFLQEYL DAIKKFYQTS VESTDFANAP EESRKKINSW

VESQTNEKIK NLIPEGNIGS NTTLVLVNAI YFKGQWEKKF NKEDTKEEKF  
VESQTNEKIK NLFDPGTIGN DTTLVLVNAI YFKGQWENKF KKENTKEEKF

WPNKNITYKSI QMMRQYTSFH FASLEDVQAK VLEIPYKGKD LSMIVLLPNE  
WPNKNITYKSV QMMRQYNSFN FALLEDVQAK VLEIPYKGKD LSMIVLLPNE

IDGLQKLEEK LTAEKLMEWL SLQNMRETRV DLHLPRFKVE ESYDLKDTLR  
IDGLQKLEEK LTAEKLMEWL SLQNMRETCV DLHLPRFKME ESYDLKDTLR

TMGMVDIFNG DADLSGMTGS RGLVLSGVLH KAFVEVTEEG AEAAAATAVV  
TMGMVNIFNG DADLSGMTWS HGLSVSKVLH KAFVEVTEEG VEAAAATAVV

GFGSSPASTN EEFHCNHPFL FFIRQNKTN ILFYGRFSSP  
VVELSSPSTN EEFCCNHPFL FFIRQNKTN ILFYGRFSSP

FIG. 3

## SCCA1A2 cDNA sequence

ATGAATTCAC TCAGTGAAGC CAACACCAAG TTCATGTTTCG ACCTGTTCCA ACAGTTCAGA  
 AAATCAAAAG AGAACAACAT CTTCTATTCC CCTATCAGCA TCACATCAGC ATTAGGGATG  
 GTCCTCTTAG GAGCCAAAGA CAACACTGCA CAACAGATTA AGAAGGTTCT TCACTTTGAT  
 CAAGTCACAG AGAACACCAC AGGAAAAGCT GCAACATATC ATGTTGATAG GTCAGGAAAT  
 GTTCATCACC AGTTTCAAAA GCTTCTGACT GAATTCAACA AATCCACTGA TGCATATGAG  
 CTGAAGATCG CCAACAAGCT CTTCTGGAGAA AAAACGTATC TATTTTTACA GGAATATTTA  
 GATGCCATCA AGAAATTTTA CCAGACCAGT GTGGAATCTG TTGATTTTGC AAATGCTCCA  
 GAAGAAAGTC GAAAGAAGAT TAACTCCTGG GTGGAAAGTC AAACGAATGA AAAAATTAA  
 AACCTAATTC CTGAAGGTAA TATTGGCAGC AATACCACAT TGGTTCTTGT GAACGCAATC  
 TATTTCAAAG GGCAGTGGGA GAAGAAATTT AATAAAGAAG ATACTAAAGA GGAAAAATTT  
 TGGCCAAACA AGAATACATA CAARTCYRTA CAGATGATGA GGCAATACAM WTCYTTTMTAT  
 TTTGCCTYGC TGGAGGATGT ACAGGCCAAG GTCCTGGAAA TACCATACAA AGGCAAAGAT  
 CTAAGCATGA TTGTGYTGCT GCCAAATGAA ATCGATGGTC TSCAGAAGCT TGAAGAGAAA  
 CTCACTGCTG AGAAATTGAT GGAATGGACA AGTTTGCAGA ATATGAGAGA GACAYGTGTC  
 GATTTACACT TACCTCGGTT CAAARTGGAA GAGAGCTATG ACCTCAAGGA CACGTTGAGA  
 ACCATGGGAA TGGTGRATAT CTTCAATGGG GATGCAGACC TCTCAGGCAT GACCKGGAGC  
 CRCGGTCTCK YRSTATCTRR AGTCCTACAC AAGGCCTTTG TGGAGGTYAC WGAGGAGGGA  
 GYRGAAGCTG CAGCTGCCAC CGCTGTAGTA GTAGTCGAAT TATCATCTCC TTCAACTAAT  
 GAAGAGTTCT GTTGTAATCA CCCTTTCTTA TTCTTCATAA GGCAAATAA GACCAACAGC  
 ATCCTCTTCT ATGGCAGATT CTCATCCCCA TAG

FIG. 4

SCCA1A2 amino acid sequence

MNSLSEANTK FMFDLFQQFR KSKENNIFYS PISITSALGM VLLGAKDNTA  
QQIKKVLHFD QVTENTTGKA ATYHVDRSGN VHHQFQKLLT EFNKSTDAYE  
LKIANKLFGE KTYLFLQEYL DAIKKFYQTS VESVDFANAP EESRKKINSW  
VESQTNEKIK NLIPEGNIGS NTTLVLVNAI YFKGQWEKKF NKEDTKEEKF  
WPNKNTYKSI/V QMMRQYT/NSFH/N FAS/LLEDVQAK VLEIPYKGKD LSMIVLLPNE  
IDGLQKLEEK LTAEKLMEWL SLQNMRETR/cV DLHLPRFKV/ME ESYDLKDTLR  
TMGMVD/NIFNG DADLSGMTG/WS R/HGLV/SL/VSG/KVLH KAFVEVTEEG  
A/VEAAAATAVV  
VVELSSPSTN EEFCCNHPFL FFIRQNKTNS ILFYGRFSSP

FIG. 5

## SCCA2A1 cDNA sequence

ATGAATTCAC TCAGTGAAGC CAACACCAAG TTCATGTTTCG ATCTGTTCCA ACAGTTCAGA  
AAATCAAAAG AGAACAACAT CTTCTATTCC CCTATCAGCA TCACATCAGC ATTAGGGATG  
GTCCTCTTAG GAGCCAAAGA CAACACTGCA CAACAAATTA GCAAGGTTCT TCAC'TTTGAT  
CAAGTCACAG AGAACACCAC AGAAAAAGCT GCAACATATC ATGTTGATAG GTCAGGAAAT  
GTTTCATCACC AGTTTCAAAA GCTTCTGACT GAATTCAACA AATCCACTGA TGCATATGAG  
CTGAAGATCG CCAACAAGCT CTTCGGAGAA AAGACGTATC AATTTT'TACA GGAATATTTA  
GATGCCATCA AGAAATTTTA CCAGACCAGT GTGGAATCTA CTGATTTTGC AAATGCTCCA  
GAAGAAAGTC GAAAGAAGAT TAACTCCTGG GTGGAAAGTC AAACGAATGA AAAAATTA'AA  
AACCTATTTTCTGATGGGAC TATTGGCAAT GATACGACAC TGGTTCCTTGT GAACGCAATC  
TATTTCAAAG GGCAGTGGGA GAATAAATTT AAAAAAGAAA A'CACTAAAGA GGAAAAATTT  
TGGCCAAACA AGAATACATA CAARTCYRTA CAGATGATGA GGCAATACAM WTCYTTT'MAT  
TTTGCCTYGC TGGAGGATGT ACAGGCCAAG GTCCTGGAAA TACCATACAA AGGCAAAGAT  
CTAAGCATGA TTGTGYTGCT GCCAAATGAA ATCGATGGTC TSCAGAAGCT TGAAGAGAAA  
CTCACTGCTG AGAAATTGAT GGAATGGACA AGTTTGCAGA ATATGAGAGA GACAYGTGTC  
GATTTACACT TACCTCGGTT CAAARTGGAA GAGAGCTATG ACCTCAAGGA CACGTTGAGA  
ACCATGGGAA TGGTGRATAT CTTCAATGGG GATGCAGACC TCTCAGGCAT GACCKGGAGC  
CRCGGTCTCK YRSTATCTRR AGTCCTACAC AAGGCCTTTG TGGAGGTYAC WGAGGAGGGA  
GYRGAAGCTG CAGCTGCCAC CGCTGTAGTA GGATTCGGAT CATCACCTAC TTCAACTAAT  
GAAGAGTTCC ATTGTAATCA CCCTTTCCTA TTCTTCATAA GGCAAATAA GACCAACAGC  
ATCCTCTTCT ATGGCAGATT CTCATCCCCG TAG

FIG. 6

## SCCA2A1 amino acid sequence

MNSLSEANTK FMFDLFQQFR KSKENNIFYS PISITSALGM VLLGAKDNTA  
QQISKVLHFD QVTENTTEKA ATYHVDRSGN VHHQFQKLLT EFNKSTDAYE  
LKIANKLFGE KTYQFLQEYL DAIKKFYQTS VESTDFANAP EESRKKINSW  
VESQTNEKIK NLFPDGTIGN DTTLVLVNAI YFKGQWENKF KKENTKEEF  
WPNKNTYKSI/V QMMRQYT/NSFH/N FAS/LLEDVQAK VLEIPYKGKD LSMIVLLPNE  
IDGLQKLEEK LTAEKLMEWL SLQNMRETR/cV DLHLPRFKV/ME ESYDLKDTLR  
TMGMVD/NIFNG DADLSGMTG/WS R/HGLV/SL/VSG/KVLH KAFVEVTEEG  
A/VEAAAATAVV  
GFGSSPASTN EEFHCNHPFL FFIRQNKTNS ILFYGRFSSP

FIG. 7



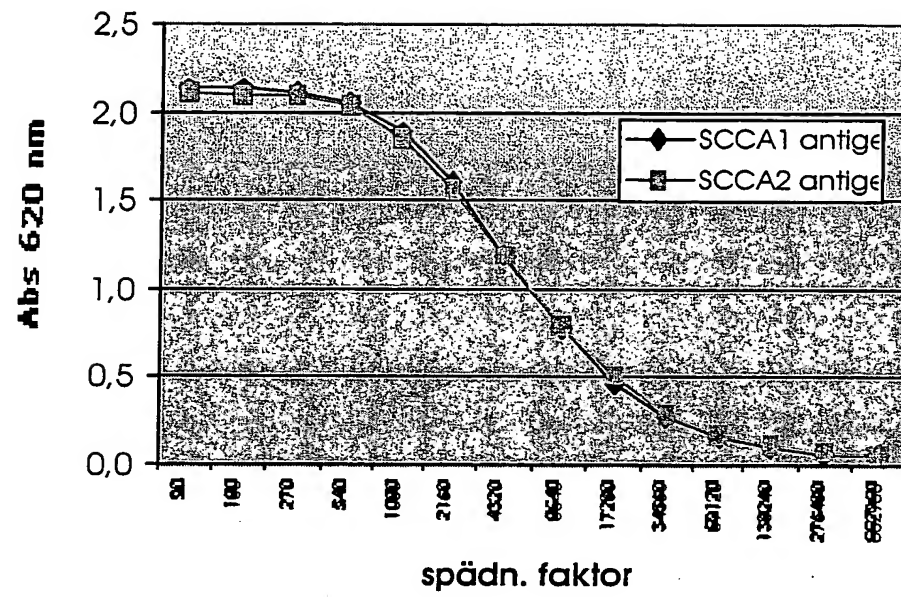


FIG. 8

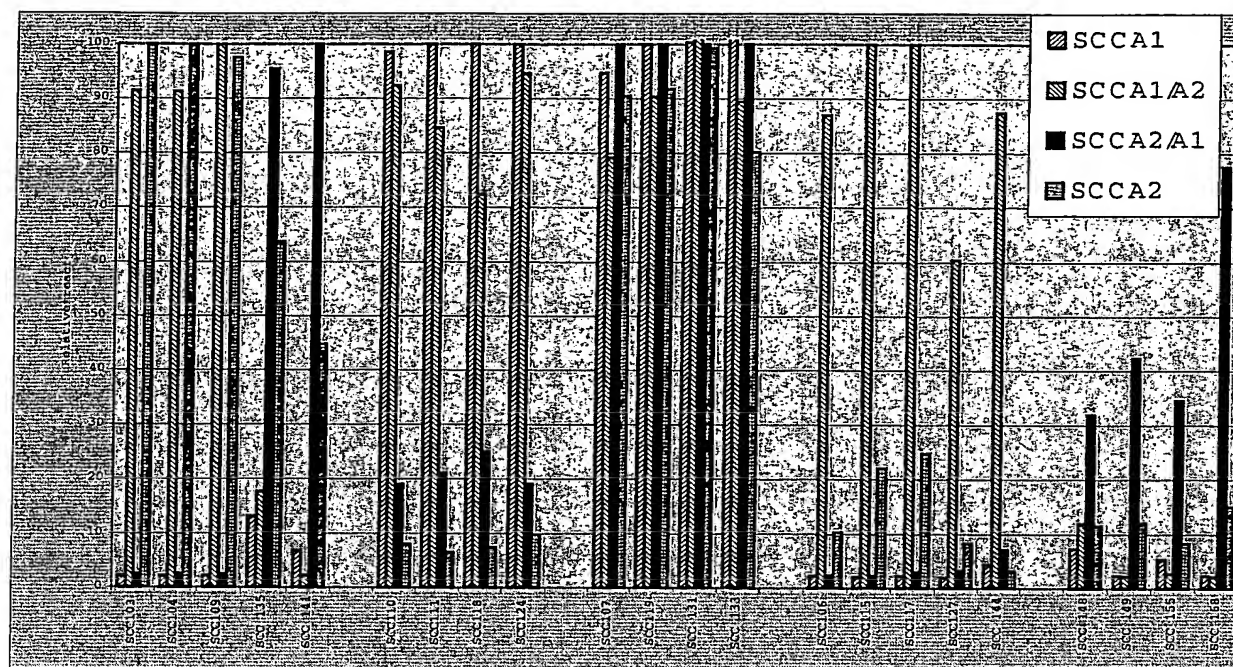


FIG. 9

## Complexbinding of SCCA

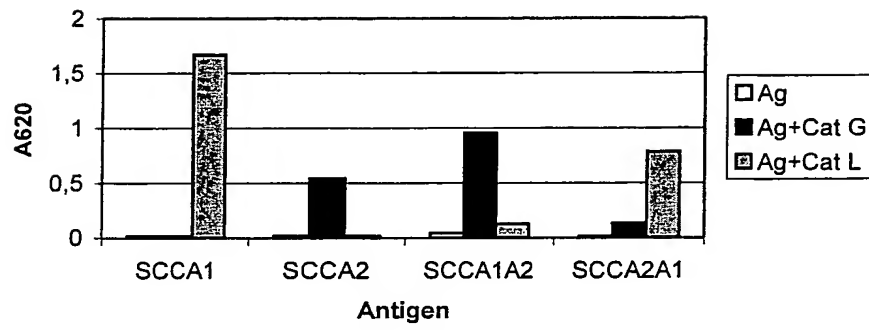


FIG. 10